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March 1992

Profile

a guide to military lifestyles

Navy SEALs

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PLANE CRASH

Answering the Riddle 'Why?'

Plus: Riverine Marines, HAWK Missile Teams,
Coast Guard Quartermasters,
Navy Divers and more!

Contest Winner!

F.Y.I.

For Your Information

Last month **PROFILE** ran a story entitled "Head of the Class" that detailed how the Navy was grooming its future officers through the Reserve Officers' Training Corps' program. The story mentioned a nationwide study that showed NROTC graduates had a grade point average about 1.10 points higher than the average student.

That's no small accomplishment and it's one we couldn't resist mentioning in the story. But the fact NROTC students fare so well isn't really news. Others seem to know it too.

Dr. James V. Koch, president of Old Dominion University, says, "...Student midshipmen are among the academic elite within the student body" and calls the NROTC program "a winner!"

Harrison B. Wilson, president of Norfolk State University, notes, "If the quality of leadership evidenced by NSU's midshipmen and officer candidates is any indication, the country is indeed in good hands."

William R. Harvey, president of Hampton University, also acknowledges the importance of NROTC and adds, "...Education is as much a part of this nation's defense and prosperity as all the guns and missiles that we can devise."

Those are some strong endorsements. And they underscore an important point — that education is as much a necessity in the military as it is in any other walk of life. The average educational level of people coming into the military proves that...but that's a story for another issue.

Anyway, enough of the past. Here's what's on tap this month.

Our lead story focuses on what happens when an Air Force aircraft crashes. There are a lot of questions that have to be answered when an accident occurs and the reason is simple — the answers can save lives.

Next is a feature on the Army's Optical Fabrication Laboratory. At this place, "making spectacles" is something you do every day.

Then, read how the Marine Corps got involved with riverine warfare. It's an entirely new mission for the Corps and one they had to get up to speed on in minimal time.

The photofeature focuses on Navy SEALs. 'Nuff said.

Our Officer Profile features Captain John Green, an Air Force social actions officer. The specific career fields we cover this month include Army light-wheeled vehicle mechanics, Navy divers, Marine Corps HAWK missile crews and Coast Guard quartermasters.

And, in "P.S.," Private Profile announces the December caption contest winner.

It's a pretty full bill. You're bound to find something that'll interest you.

Steve Dry

Master Sergeant Steve Dry, USAF
Managing Editor

Profile

Director
Cmdr. Edward H. Lundquist USN
Deputy Director
Maj. Gerard Haag, USA
Managing Editor
MSgt. Steven J. Dry, USAF
Editors
JO1 Lorenzo M. Garcia, USN
Sgt. Donald T. Wrenn, USA
Cpl. Karl C. Ulrich, USMC
Circulation
SSgt. James E. Shuff, USAF

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A Navy SEAL. U.S. Navy Photo

An investigation team surveys plane wreckage.
Cpl. Karl C. Ulrich

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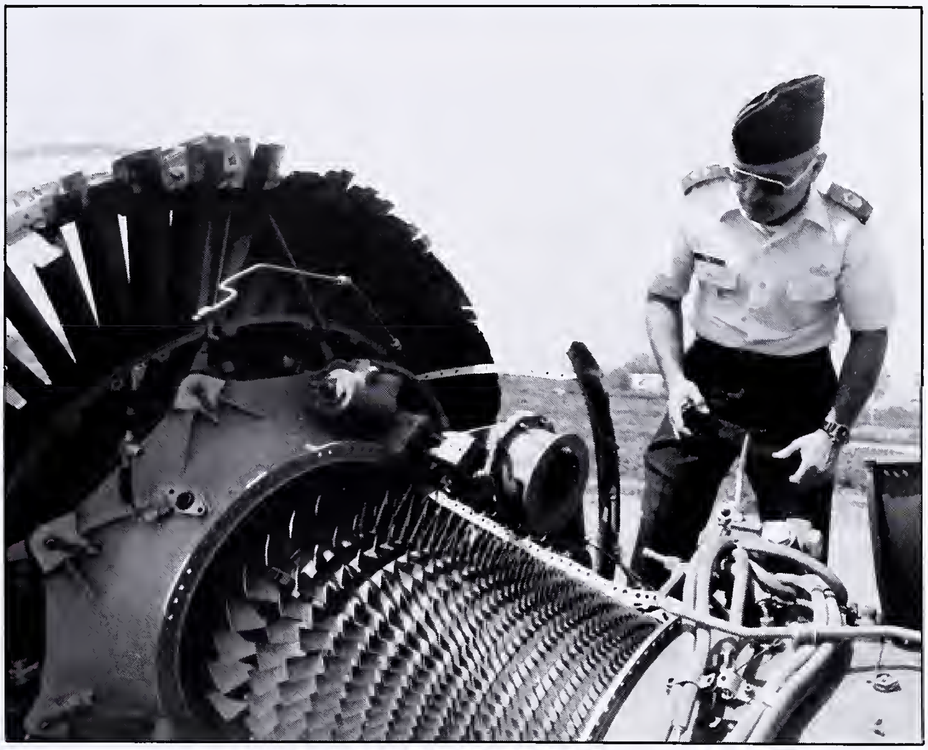

Cpl. Karl C. Ulrich

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That's the task a Mishap Investigation Board faces when an aircraft crashes; and the completed puzzle often saves lives.

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When the mission is toughest, these guys are there to meet it head-on.

When an Air Force plane crashes, the question is 'Why?' The answer depends on…

Putting the Pieces Together

Story and photos by Corporal Karl C. Ulrich

It only took about three seconds for the pilot to realize something was wrong, but three seconds wasn't enough and, three seconds later, nothing mattered anymore.

In an instant, a $37 million aircraft became a worthless jigsaw puzzle, and the irreplaceable lives of two Air Force pilots were lost forever.

"It's probably the most daunting thing that can affect any pilot," said Major Roy Poole, a U.S. Air Force pilot and trained mishap investigator. "To walk out and look at a million dollar airplane that's all balled up in a six-foot hole, and know that the pilot is still inside…"

It's a gamble every pilot takes when he straps himself into a cockpit. The winnings are often hard to define, but the stakes are clear…you bet with your life.

Working to even the odds are men and women, like Poole, who serve on the Air Force's Mishap Investigation Boards.

"Our job is to take that thing, reconstruct the flight and determine what went wrong," said Poole. "That way, we can figure out how to prevent it from happening again."

Armed with an arsenal of information, members of a mishap board have what some pilots call, "the most important job in the Air Force."

But, with only 30 days (by Air Force regulation) to determine the cause of a crash, this six-person team of investigators might find it easier to solve all the cases of Sherlock Holmes. Working 'round the clock, they must analyze every resource available to distinguish the difference between what may have happened and what really took place.

One of the pieces of the puzzle.

Major Roy Poole uncovers a clue.

"There are a lot of specialized things we can do to determine exactly what happened," said Poole. "Believe it or not, we can actually use seismic data to determine the exact time an aircraft crashed. The impact of an F-4 fighter on the side of a mountain, for example, registers on a seismic graph. We can go over to Cal Tech (California Institute of Technology) and they can give us the precise time of impact.

"We can load helicopters with infrared film and have them fly over the crash sight to pick up any hot spots that might be missing pieces of the aircraft."

This often proves to be vital. Any trained investigator knows he has to treat every piece of the plane like a piece of an intricate jigsaw puzzle. He never knows which piece might complete the picture, or what story the remains might have to tell. Sometimes, the wreckage tells a truer tale than even an eyewitness.

"It's not that the witnesses are lying to you," said Poole, "but they can only tell you what they thought they saw. Once we had an eyewitness who told us he saw a heavy aircraft, an explosion and, then, the wing came off. Now, their mind kind of twists things around until it makes sense to them. In this case, the man put two and two together and decided it must have been a bomb. But, by looking at the

A maintenance expert on the investigation team examines a piece of wreckage.

wreckage, we were able to tell that what actually happened was that the wing had been overloaded and failed. When it failed, the fuel had vaporized, instantly creating a cloud which was ignited by a spark from a broken wire. This flash of light created the 'explosion' the man had seen from the ground."

Even when the team is able to talk to the pilot of a crashed plane, who some might consider the perfect witness, he or she often tells a story that varies from what really occurred. Poole remembered videotaping one pilot whose body language told them more than his words.

"He had lost control of the plane and was forced to bail out," said Poole. "We had a good feeling that he had lost consciousness before losing control of the plane, though he said he hadn't. But, when we watched him tell his story a second time, we noticed that when he got to the point where we thought he had lost consciousness his foot began to bounce. Until we got to the point where we thought he might have regained consciousness, that foot contined to bounce. Now that's not evidence, but it sure looked like he was nervous."

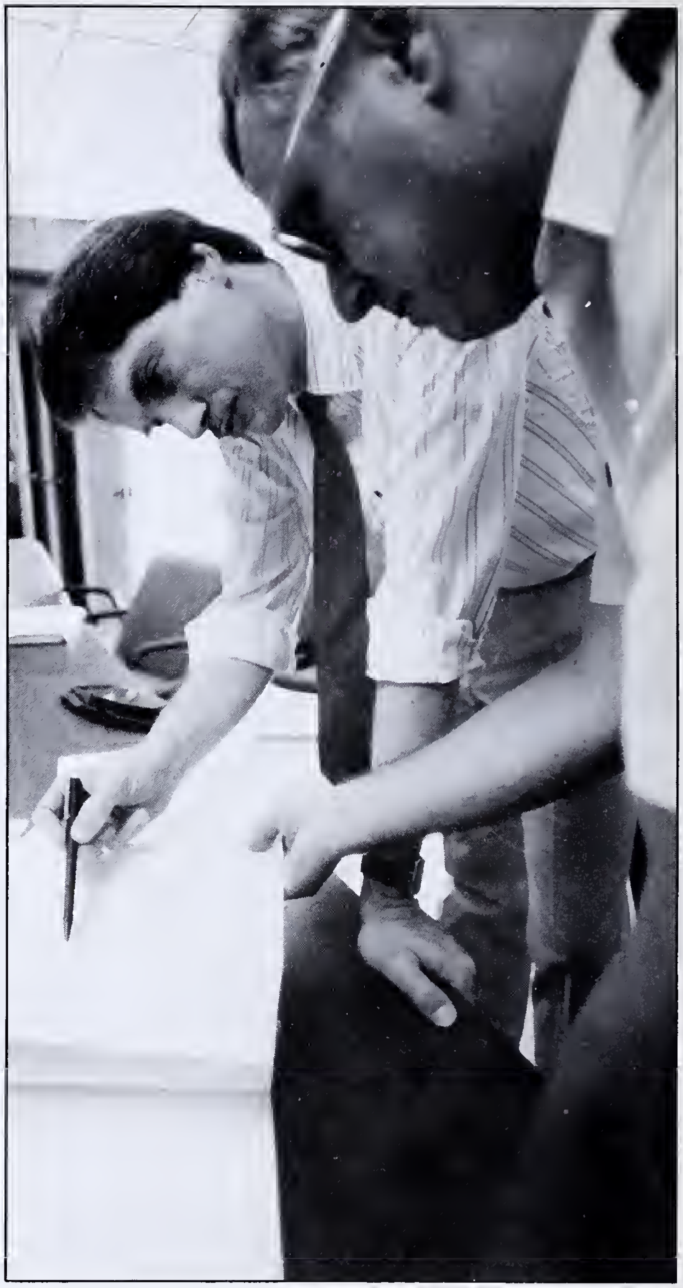
The nervousness was actually a subconscious reaction created from something called G-loss consciousness, said Poole. The G-loss consciousness had given the pilot amnesia and, while the pilot tried to tell his tale to the best of his ability, his subconscious began filling in the missing pieces the amnesia had created.

"You and I essentially like to know about every second of our lives," said Poole. "And, if there is a period of time in your life that you can't remember, you want to fill it in. So, based on your experience, your subconscious will begin to fill that part in for you."

"Once we put a pilot in a centrifuge and spun him for about five minutes," said Poole. "When it reached six Gs (six times the force of gravity), he passed out...we stopped the centrifuge and, when he came to, his first reaction was, 'Okay, when is this thing gonna' start?' Not only did he lose the time in which he was blacked out, but everything from the spin up to the time he lost consciousness was gone."

When the board can't discover any evidence of plane malfunction, it's time to consider factors like these and determine what the pilot may have done to cause the crash. But when the pilot is dead, the team is forced to make the call.

"We only allow ourselves 30 days to do this process so, frequently, you come to a point where the pilot could have done A or B," said Poole. "Often it gets down to our best estimate; we look at what we have, and then we vote. We don't have the pilot to talk to so we have to make a decision."



Analyzing technical data is part of the puzzle solving process during the investigation.

Once a decision has been reached, the most crucial part of the job boils down to one question.

"What can we do to keep this from happening again?"

After all, he who does not learn from his mistakes is doomed to repeat them.

Poole and investigators like him use their knowledge of the past to change the outcome of the future.

When your job takes you 50,000 feet in the air, you can really appreciate that. ⬟

'It Was the Worst Day of My Life . . .'

Story and photo by Corporal Karl C. Ulrich

It was Halloween, though, so far, the day hadn't seemed particularly scary.

Soaring gracefully above earth, two Air Force pilots gazed down at the soft, green countryside...only to see it suddenly rush toward them with blinding speed.

It would be the last thing they ever saw.

"I was told one of our airplanes had to make a forced landing," said Major Roy Poole, a pilot and trained mishap investigator. "Since I had the experience of being on previous mishap investigation boards, they wanted me to ride out with the initial investigation team."

Unaware of the pilots' conditions, Poole arrived at the crash sight, prepared to conduct an interview. He would talk to the two pilots, find out what had gone wrong, and make a recommendation.

However, things aren't always that simple.

"Looking at the airplane, it appeared to be intact, and there were two individuals walking around the plane so I figured they were the pilots," said Poole. "But, as we drove up, I saw that the two individuals were, in fact, two local farmers. The pilots were still inside the cockpit and they appeared to be very still and very stiff."

Major Roy Poole

Trying desperately to pull out of the dive, it seemed the pilot had managed to level off the plane. A few more feet and he might have survived. But he didn't. The force of the impact had killed him instantly.

Meanwhile, for Poole, the surprises were just beginning. Peering through the canopy, Poole felt an icy chill shoot through his body as he stared into the face of a dead man...the face of a longtime friend.

"It was a stunning moment I guess is the best way to put it," said Poole. "You're struck by it...and then slowly it hits you. Suddenly, I had all this stress that needed to be relieved. But I was lucky. In this case, I had something to do. I could investigate.

"I realized the best tool I had to keep this from happening to any more of my friends was to put aside all my feelings and do my job the best way I could."

"It was a long, hard night," said Poole. "It snowed on us, it rained on us...Being a holiday didn't make it any easier, because I knew he had family. Most of the time, as a pilot, you tend not to think about your mortality and you put a lot of confidence in your aircraft. But something like this really hurts and it makes you think."

Digging through piles of paperwork, Poole discovered a similar case, where the investigation board found the problem to be pilot error. But Poole wasn't willing to accept that — not just yet.

Running his own tests, Poole was able to duplicate the sequence of events at a safer altitude and verify his theory. The pilot had done what he could. It was the plane that had failed.

Armed with the evidence, Poole set out to keep his promise. He would correct the aircraft's problems so that no one else would wind up like his friend.

"We were able to improve the shoulder harness system and correct some design flaws in the aircraft," said Poole. "And, we were able to make recommendations for a means to counteract a similar situation should it occur."

Poole's recommendations became part of the standard training program for pilots of that particular aircraft.

Four years later, Poole met another pilot who, like his friend, had wound up in a strong, vertical dive.

"He told me had they not had the training and benefits of what my boys earlier had done, he would not be alive today."

Keeping Things IN FOCUS

Locating the optical center of the glass is an important step during two parts of the process. The first is when the glass is ground to the correct prescription and the second is when the glass is cut to the correct shape for the frame.

Story and photos by
Sergeant D. Townsend Wrenn

While some people join the military to see the world, the Army's Optical Fabrication Laboratory goes a long way toward ensuring they keep it in focus.

Located at Fitzsimmons Army Medical Center, Aurora, Colo., the lab supplies glasses for military members and retirees west of the Mississippi River. They also service orders from Panama and some parts of Europe.

"Last year we turned out 500,000 pairs, including those from Desert Storm," said Colonel (Dr.) Donald Dunphy, lab chief. During a normal year, the lab fills about 400,000 prescriptions.

The lab is not like the typical commercial "you get your glasses in an hour" franchise, said Master Sergeant Edgar Guzman, noncommissioned officer in charge of the lab.

For one thing, the Army lab makes lens inserts for gas masks as well as traditional eyeglasses.

Another difference is the Army lab does a higher percentage of complex prescriptions.

"They (commercial labs) take mostly pre-made lenses and put them into the frames you want," said Guzman. "We do do that, as well as grind glasses for more complicated prescriptions."

"Because of the volume that the lab sees," said Dunphy, "it takes us about two weeks to get out glasses with pre-made lenses and about four weeks for ones that we have to grind."

When an order is received, lab technicians check if there are preglasses with pre-made lenses and about four weeks for ones that we have to grind."

When an order is received, lab technicians check if there are pre-made lenses in stock. If not, the lenses must be made from scratch.

That's a multi-step process.

First, the correct weight of glass is selected. Then, the optical center is marked and the glass is sprayed with a protective coating. A chuck is then attached to the glass before it is ground down. The grinding process involves more than just sanding down a rough piece of glass. The tool used for the grinding has to be the right one. There are literally hundreds of grinding tools — one for each thickness of glass.

When the lens comes out of the grinder, it is fogged. The foggy appearance is buffed away and the lens goes through a cleaning process to remove any dust particles.

From this point, the process for pre-made lenses and ground lenses is the same.

The optical center is marked once again before a chuck is attached so the lens can be cut to the shape of the frame.

The lens is then "cooked" for about 16 hours at nearly 850 degrees Fahrenheit to make it impact-resistant.

The edge of the lens is then bevelled prior to being inserted into the frame.

Finally, the finished product is checked by an inspector to ensure the lenses are flawless and of the proper strength.

"Surfacing lenses is the most critical part of our job," Guzman said. "By the time that you get someone trained, it's time to switch people around because we have to train everybody everywhere."

The idea is simple — everybody in the lab is able to perform any part of the process.

That's not a bad way to operate when you're in the business of ensuring clarity is job one. ◆

Buffing the fog from the glass takes place after grinding. Machines buff out the glass in approximately 10 minutes. One soldier runs a bank of ten machines.

'Sanding' down the edges of the glass (left) takes place just prior to the lens being inserted into the frame (above).

U.S. Marine Corps Photos

A "riverine warrior" mans a .50 caliber machine gun.

Riverine Marines

By Corporal Karl C. Ulrich

"From the Halls of Montezuma to the shores of Tripoli, we will fight our country's battles, in the air, on land, and sea." — The Marines' Hymn.

Never in the history of America had a military service been bold enough to boast such bravery.

With one lionhearted lyric, the Marine Corps laid claim to over 90 percent of the globe. And it was no bit of bravado; they had the muscle to back it up.

It seemed there was nowhere the Marines couldn't fight. At least that's what they thought until March 1990.

"The Marines' Hymn states that we will fight in every clime and place," said Colonel Jim Bathurst, the father of riverine warfare. "But, the truth is, if we had been asked to conduct operations in an area like the Florida Everglades we would have had some serious problems."

For 216 years, the Marine Corps has romped and stomped its way across the world, winning victories in every arena except one. It seemed, somehow, the Corps had overlooked man's oldest and truest tool of transportation. The Marines had no way of fighting on a river!

"We are an expeditionary force," said Bathurst. "We teach our Marines to fight in the mountains, the snow, the desert, and the jungle. But what we needed was to be able to fight in an area where roads are rudimentary and the major lines of communications are waterways."

"You have to look at the time frame. The cold war was over, the bear ain't the bear anymore, and there was a feeling among the Marine Corps that we needed to take a look at the areas we've been ignoring for so long. Areas like South America.

"If you look at the three Andean ridge countries, Columbia, Bolivia and Peru, you have 65,000 miles of navigable waterways. If you can't use those waterways the way you would use a road, you're going to have a hard time fighting."

And, if admitting the problem is really half the battle, the Marine Corps had already begun to take its first steps to victory.

"Obviously, we needed a boat, we knew that much," said Bathurst. "But what kind of boat? Well, we needed something that could provide direct-fire support and it needed to be able to conduct a high-speed pursuit."

A short time later, Bathurst got his boat. A demonstration model from a company in Arkansas, the RAC, or Riverine Assault Craft, arrived August 1990. Now, all he had to do was work out the bugs.

Gathering Marines from every available career field, Bathurst used their combat experience to develop the perfect assault craft.

And, as if that wasn't enough, Bathurst and his men only had six weeks to develop a five-week riverine training course. It seems the first group of students were already on the way.

"We literally worked seven-days-a-week, sometimes 24-hours-a-day," said Bathurst. "Before us, there were really no experts on riverine warfare. We had to invent it before we could teach it."

By the time the students had arrived, Bathurst's men had completed their program of instruction.

"Now we could step back and let them (the students) drive the boats and we became evaluators," said Bathurst. "We spent weeks recording everything."

By December, the team had gone through seven boats, yards of videotape and hundreds of sheets of paper. With the brisk, winter winds upon them, it was time for a true operational evaluation.

"I remember times in August when a young Marine said to me, 'Colonel, do you believe they're paying us to do this?' But, in December, I remember that same Marine saying, 'Colonel they don't pay us enough to do this!'"

For two weeks, the team ran the craft through every possible situation they thought it might encounter. Finally, they knew exactly what they wanted.

The only problem was they only had two weeks to write it all down. By Jan. 2, 1991, the Marine Corps' Research, Development and Acquisition Command in Quantico, Va., needed all the team's information, complete with pictures and statistics.

"Nobody got Christmas leave," said Bathurst. "We locked ourselves inside a classroom and started writing."

Eleven hours before the deadline, a small van arrived outside the Research, Development and Acquisition Command. The team had accomplished its task.

What was once an obstacle had become an opportunity. ⬟

A riverine assault craft (RAC) speeds along a waterway.

Navy SEALS

The real deal

By Sergeant D. Townsend Wrenn

When people think of the Navy's elite Sea/Air/Land (SEAL) teams, the images they invoke are often of commandos performing suicide missions.

Hollywood has made it easy to think of the SEALs as deadly, daring saboteurs who work at night — warriors willing to take incredible risks that make most people tremble.

In some situations, those images may have some basis in reality. But, if you've made the grade and are part of this most elite of military brotherhoods, danger is something you try to minimize. Accomplishing the mission in a safe and timely manner is the goal. Teamwork is the methodology.

Training is an integral part of the whole process. SEALs learn a variety of special skills. Survival, navigation and underwater demolition are just a few. But, when you're a SEAL, you don't merely learn them. You constantly train to perfect them. And you work with newer team members to ensure they do the same. It's a process that never ends. And, when the time comes and those skills are needed, using them has already become second nature.

The SEALs are some of the most respected professionals in the military. They tackle the toughest missions the military has to offer. And, when they get done, they know they've made a difference.◆

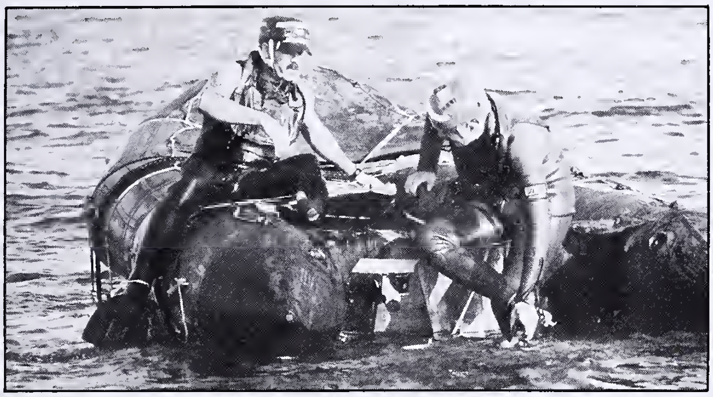
A team member looks on during a SEAL team
at Little Creek, Va.

SEAL trainees carry rubber rafts up a sand dune duri
Week,' when students' physical, emotional and ment

nonstration

U.S. Navy Photos

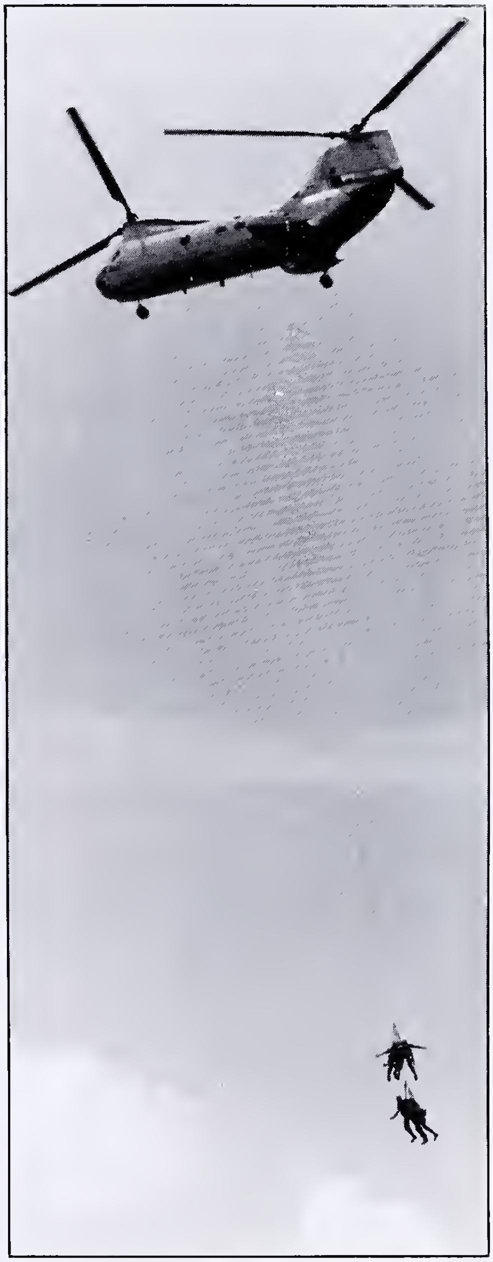
A SEAL team moves onto the beach during an infiltration exercise. Special boat units are used to infiltrate and extract SEAL teams on exercises.



A SEAL team member is picked up in an inflatable recovery boat after parachuting into the water during an Explosive Ordnance Disposal Team/SEAL Team joint parachuting exercise in Spain.

'Hell Week' exercise. Phase I of SEAL training concludes with 'Hell

bilities are put to a severe test.



A STABO extraction is one way of pulling SEALs out of a location after an operation. The SEALs will hook up to a rope hanging from a helicopter and be flown to a safe location.

Setting the Wheels in Motion

Story and photos by Sergeant D. Townsend Wrenn

Specialist Katrina Bowman checks the oil level on a truck. Light wheeled vehicle mechanics do everything from normal maintenance to pulling and replacing an engine or transmission.

Checking the oil or changing a flat tire is as mechanically inclined as some people are when it comes to their cars. And, if the engine won't start, well...there are people you can call to fix that.

Specialist Katrina Bowman is one of those people. A light wheeled vehicle mechanic at Fort Carson, Colo., the 22-year-old Santa Clara, Calif., native has the know how to fix almost any problem involving the Army's trucks and High Mobility Multipurpose Wheeled Vehicles (Humvees).

Bowman admitted that when she enlisted being a mechanic was the furthest thing from her mind. But, when she received a list of jobs that were available to her, "mechanic" was one of them.

It wasn't uncharted territory for her. Bowman took auto shop in high school.

"I took auto shop to be different," Bowman said, smiling. "I didn't want to be illiterate when it came to my car."

While auto shop gave Bowman the chance to learn the basics of car maintenance, she admits, "...the Army's vehicles aren't like your car."

For one thing, Army vehicles routinely operate in some extreme environments. Imagine having to rely on the family station wagon to get across the desert in Saudi Arabia or over the rambling hills in a place like the Republic of Korea.

When you consider the fact those vehicles are routinely expected to be capable of moving thousands of soldiers and tons of materiel quickly, you get an idea of the importance of keeping them in top condition. Operation Desert Storm underscored that.

So, Bowman keeps busy ensuring the Army's wheels are ready to roll. And, there's no such thing as a typical day. One moment she might be troubleshooting an electrical problem in a $2\frac{1}{2}$-ton truck. The next she might be replacing an engine in a Humvee.

And, unlike your local garage mechanic, Bowman sometimes makes "house calls." That involves going to where the source of the trouble is, pitching a tent and making the repair in the field.

"I like the fact that I've gained the common knowledge of how a vehicle works," Bowman said.

Bowman doesn't expect to be a mechanic after she gets out of the Army. Her plan is to go to college and get her degree. Eventually, she hopes to get into the child counseling field — a "troubleshooting" job of a different kind. ⬟

Army

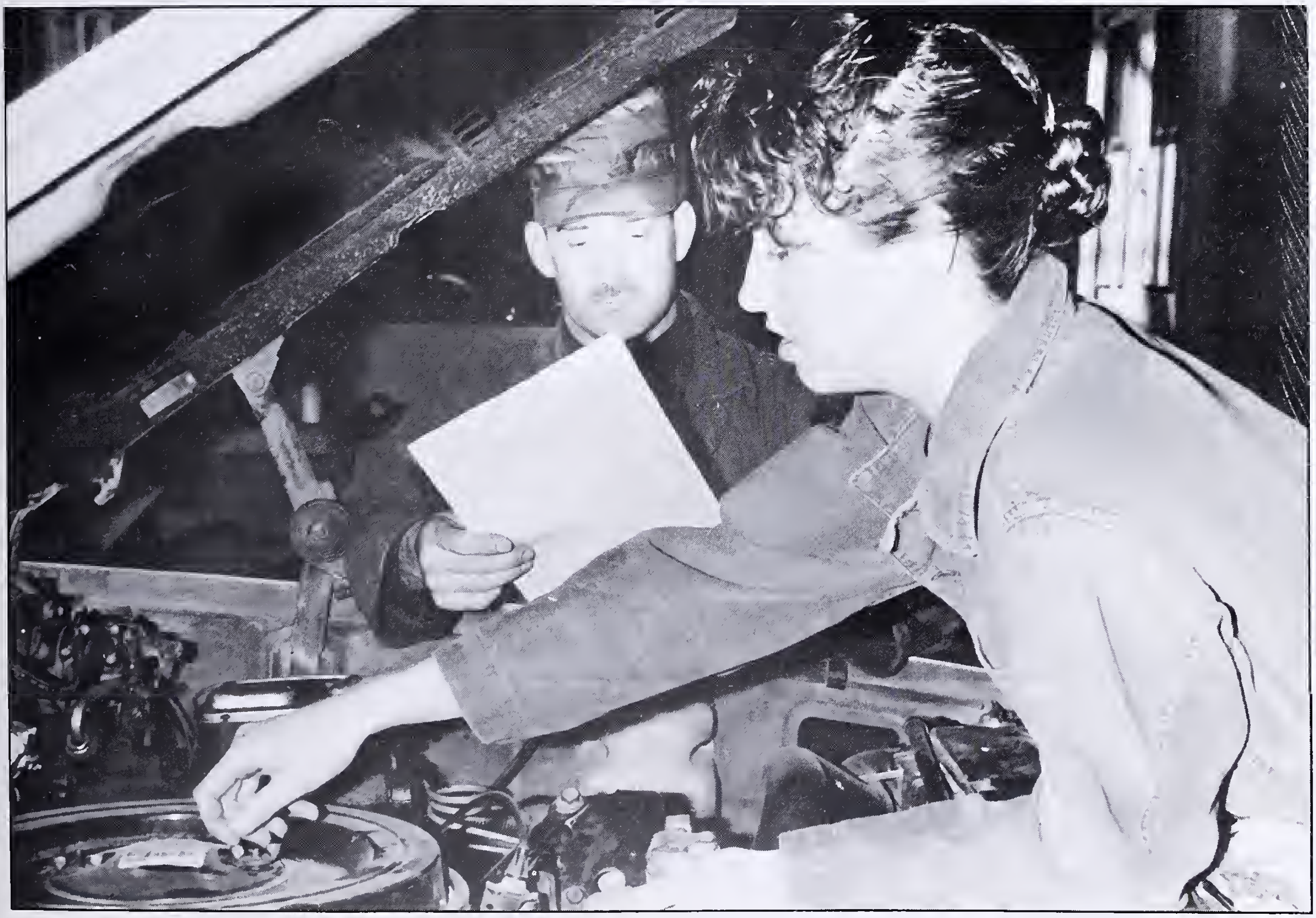
Light Wheeled Vehicle Mechanic

Description—Services and repairs light vehicles such as cars, trucks and Humvees.

Helpful background skills—Automotive mechanics, electricity, blueprint reading, machine shop and physics.

School—Ten-week course at Fort Leonard Wood, Mo.

Related civilian jobs—Automotive mechanic, motor analyst, frame and alignment specialist and tractor mechanic.



Bowman tightens the air cleaner after checking the filter.

DIVER DOWN

By Corporal Karl C. Ulrich

It was the largest drug bust in maritime history and, if you can picture Don Johnson in a wet suit, it could have been a scene right out of *Miami Vice.*

Spotting a suspected drug-smuggling ship off the coast of Cuba, the U.S. Coast Guard had attempted to intercept it when the suspects suddenly jumped overboard and the ship burst into flames.

Seeking to destroy the evidence, the suspects had scuttled their ship, tossing Molotov cocktails into the engine room as the hull began to fill with water.

It seemed any hope of a conviction was on its way to the bottom of the sea, and all the vice cops in the world couldn't do anything to stop it.

Meanwhile, in Norfolk, Va., it was 3 o'clock in the morning and Petty Officer Kelly House was busy answering the telephone.

House, a Navy diver with Mobile Diving Salvage Unit Two, was quickly alerted to the situation. He knew it would take a while for a 500-foot vessel to sink, but he also knew Norfolk was a long way from Cuba. It was only a matter of time before the evidence became the new attraction in Davy Jones' locker, and it seemed House and his team were the only ones who could stop it.

"We have to be ready to go anywhere in a matter of hours," said House. "You have to have your bags packed at all times... You never know when you might get picked to go."

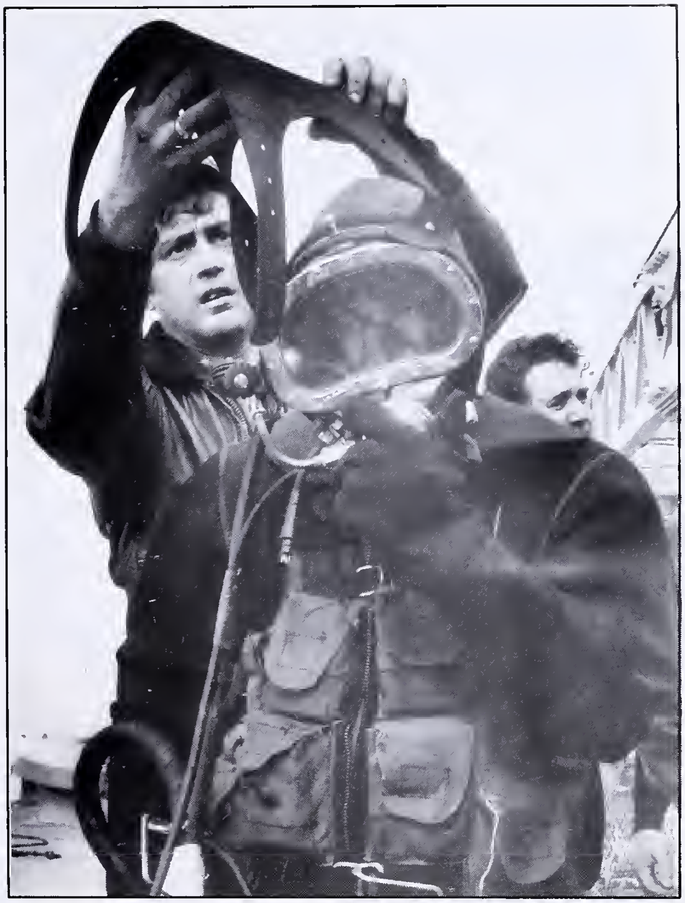
Forty-five minutes after receiving the call, House was ready and, a few hours later, his entire team was on its way.

Once on the site, House saw they had a lot of work to do and only a little time.

"There was only about 4½ feet left before it (water) would have covered the main deck," said House. "The Coast Guard was able to put out the fire, but they couldn't stop the ship from sinking. We made a dive on the outside of the ship to find out where the water was coming in from, then we patched it off so we could pump the water out."

For eight days, the team lived on the sinking ship, fighting rough seas that tore open patches and fixing stubborn pumps needed to suck out the water.

"It was hard, dirty work," said House. "But I'd rather work in the water than anyplace else. Something about the water just makes you feel like you're accomplishing something."



U.S. Navy Photos

A diver prepares to submerge.

House worked, ate and slept on board the crippled ship until, finally, the water had reached a safe level and the ship was able to be towed to Florida.

"The DEA met us when we got there," said House. "It took the Coast Guard a whole day to unload all the cocaine."

Thanks to House and the members of his team, the U.S. Coast Guard impounded over 5½ tons of pure cocaine.

Not bad for a guy who gets paid to take a dive. ⬟

Navy

Diver

Description—Performs salvage and maintenance dives and operates and maintains diving related equipment.

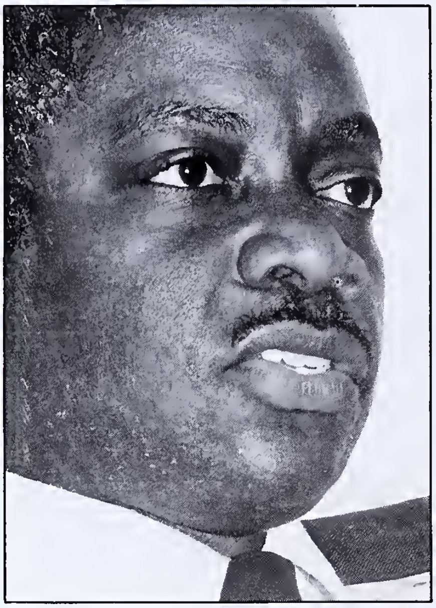
Helpful background skills—Knowledge of simple mechanics, science and the ability to work with a team.

School—Twelve and one-half weeks in either Panama City, Fla., or San Diego, Calif.

Related civilian jobs—Salvage diver or scuba instructor.

Captain John Green has handled guns, guitars and missiles. Now he's simply . . .

A Man of the People



Sgt. D. Townsend Wrenn

Captain John Green discusses his role as flight commander of Social Actions.

By Master Sergeant Steve Dry

Guns 'n Roses may be the bad boys of rock 'n roll, but Captain John Green was handling guns and guitars long before Axl Rose ever stepped onto a stage—with the Air Force's blessing.

Green, flight commander of Social Actions at Langley Air Force Base, Va., isn't likely to be confused with Axl Rose but, like the famed rocker, he has come a long way.

Green is a classic example of a "mustang." That's military parlance for an officer who used to be in the enlisted ranks. During his enlisted years, Green served as a security policeman and, later, as a musician.

Green entered the Air Force in 1970. The Vietnam War was in full force and being drafted was the way the ranks were filled.

"I had a low lotto (draft) number and, so, I enlisted...I thought, 'Certainly, the Air Force isn't in Vietnam,'" he said, smiling.

Following basic training, Green became a security policeman. He admits it wasn't something he was really cut out for.

"I was in a 60-foot tower (in Thailand) and it started to rain and a thunderstorm came up. They ordered all the tower guards down...I stayed there at the base of the tower for about 14 hours in the mud. I said, 'This is not for me,' " he laughed.

Today, he still has the poncho he covered himself with that day "as a reminder."

Green left the military in 1974 when his hitch was up. He went back to college and studied music. Three years later, he was back in the Air Force—this time as a musician.

He started off as a guitarist and, eventually, became a vocalist. But, within three years, Green had "tired of the road" and wanted to do something else. The Air Force Reserve Officers Training Corps, which offered him a chance to complete his bachelor's degree, was the answer.

Sgt. D Townsend Wrenn

Green spent his early years in the Air Force in the enlisted ranks.

Green got out the day after he was promoted to sergeant. He figured, "If I have to come back in (as enlisted), I'd at least be a sergeant instead of a senior airman... I still have that shirt today with the buck sergeant stripes—just in case."

After completing AFROTC, Green received his commission and worked in missile operations as a launch officer in Wyoming. In 1987, he got into the Social Actions field.

Today, Green helps commanders conduct equal opportunity and treatment (EOT) as well as substance abuse control programs.

In the EOT arena, Green and his staff ensure Air Force members aren't victims of discrimination or sexual harassment. The idea is to give each person an equal chance to succeed, regardless of race, color, ethnic group, creed, national origin, age or sex. Social Actions accomplishes the job by giving EOT briefings to Air Force people at various points during their careers and by handling complaints when they arise.

In the substance abuse control arena, the emphasis is on making sure alcohol or drug problems don't impact on the Air Force mission. When an individual is involved in an alcohol-related incident, for instance, Green and his people try to determine if it's a one-time event or part of a pattern. Once that is determined, Social Actions makes a recommendation to the individual's commander. The result could be anything from simply returning the individual to duty to entering the person in an educational program designed to increase awareness. In more severe cases, medically-supervised detoxification or elimination from the Air Force can result.

"This is a problem-centered business," Green said. "You have to have a handle on your own life. You have to be stable... You need to be a 'people' person."

Green relishes that. His eyes light up when he tells of a success story—a person who was able to turn things around.

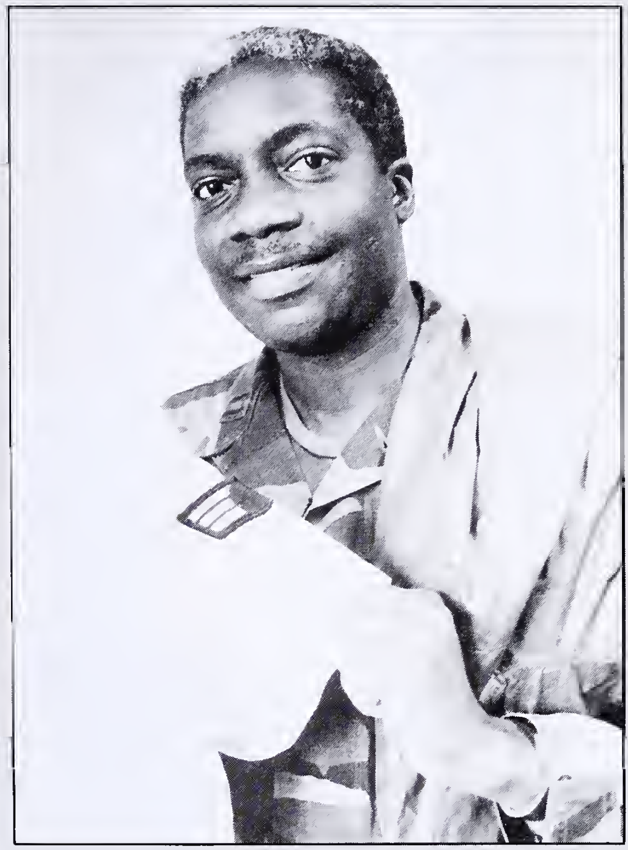
"One that comes to mind is a master sergeant... he was involved in an alcohol incident. Because of his abusive pattern, he injured himself, put one of his eyes out. He was turned around as a result of Social Actions and AA (Alcoholics Anonymous).

"... He's now one of our most sought after speakers during our (alcohol awareness) seminars. It's refreshing to see someone who was a substance abuser two years ago completely turn themselves around and (who) is now trying to turn other people around."

Green says he likes the Social Actions field because he feel he's been able to make a positive difference in people's lives.

When your business is people, that's the biggest reward there is. ⬟

Officer Profile



MSgt. Steve Dry

Captain John Green

Name — Captain John Green.
Duty title — Flight commander of Social Actions.
Birthdate — Aug. 28, 1950.
Hometown — Gainesville, Fla.
High School — Lincoln High School.
College — Valdosta State College in Georgia (undergraduate) and the University of Phoenix in Arizona (graduate).
Major — Criminology (undergraduate) and management (graduate).
Marital status — Married.
Where you've been stationed — Holloman Air Force Base, N.M.; Udorn Royal Thai Air Force Base, Thailand; Homestead AFB, Fla.; Robins AFB, Ga.; F.E. Warren AFB, Wyo.; Langley AFB, Va.
Proudest moment in your Air Force career — Graduating as a distinguished graduate and winning the "Best Writer Award" at the Defense Equal Opportunity Management Institute.
Hobbies — Writing and recording music, flying.
Hero — Dr. Martin Luther King Jr.
Favorite vacation — Disneyworld.
What would you like it to say on your epitaph? — He tried to help somebody.

The Incredible HAWK

U.S. Marine Corps Photo

A "killer bird" in flight.

By Corporal Karl C. Ulrich

Its fiery eyes pierce even the darkest sky, like invisible beams searching for prey. In an instant it's gone... its powerful wings propelling it upward, as a razor sharp beak slices through the air. To see it is to tremble but, chances are, you won't see it until it's too late. It is the mightiest attacker in the air. It is a HAWK.

Short for Homing All the Way Killer, the HAWK is a missile that, like its namesake, is a "bird" of prey. And, to an enemy pilot, these "birds" can create more fear than Alfred Hitchcock's masterpiece tale of talons and terror.

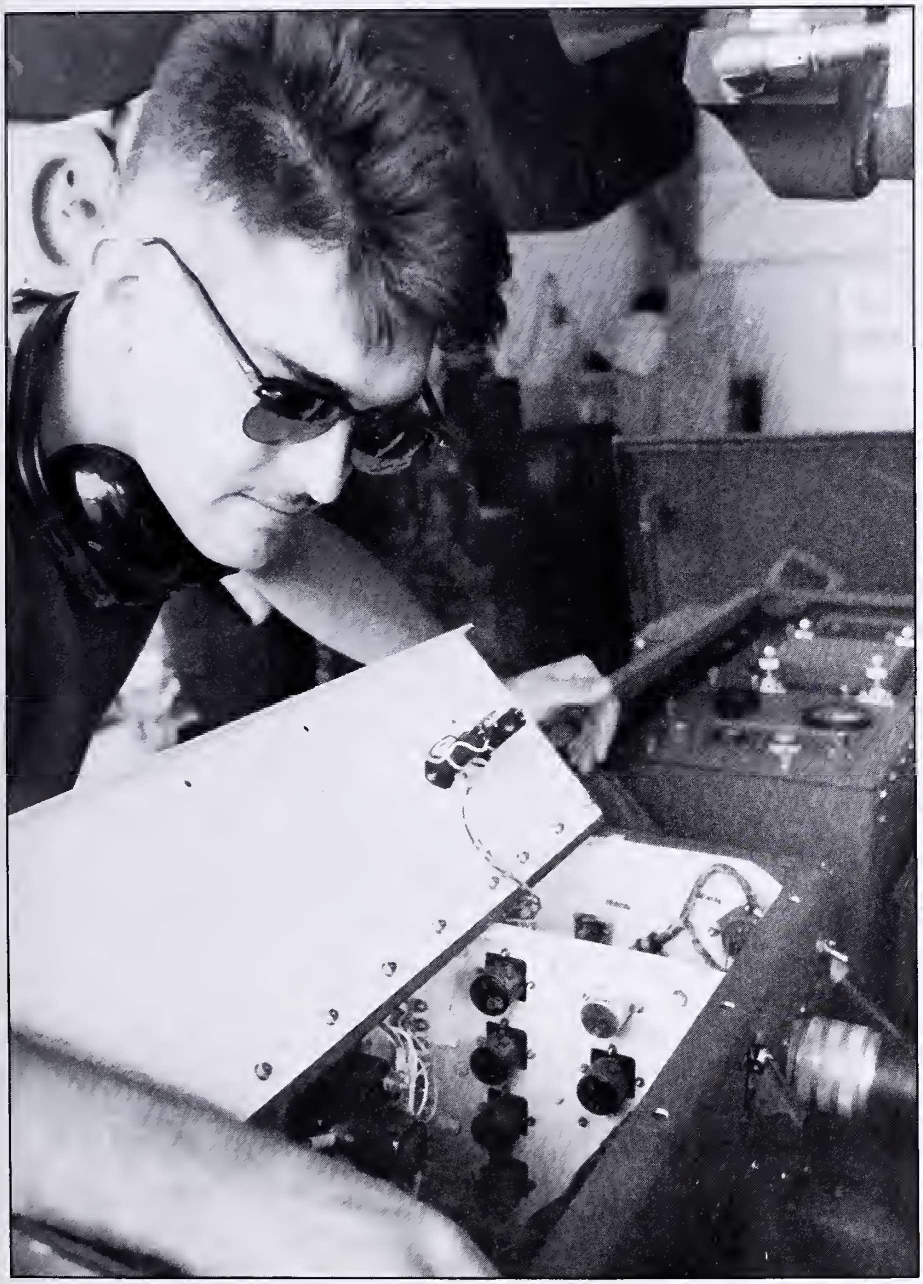
Since its birth in the 1950s, the HAWK missile has been relied on to seek out and destroy low-flying enemy aircraft, with the help of radar, computers and a "few good men" on the ground.

"The ground radar picks up the target and determines whether it's friend or foe," explained Lance Corporal Tim Piper, a member of a HAWK missile team. "Then the high power radar locks on and begins tracking the target. But, unlike heat-seeking missiles that lock onto the engine's exhaust, once we're locked on one missile can take out more than one target."

Equipped with a conventional warhead, the flight path and detonation of the HAWK are controlled from the ground.

"Since the missile isn't heat-seeking, it doesn't actually hit the target's engine but, instead, will explode at a point where it will do the most damage," said Piper. "The computer picks the best point of detonation and the missile can adjust in flight if need be. If you have four jets fairly close together, it's possible for one missile to destroy all four aircraft."

The entire system, however, depends on Marines



Lance Corporal John Tyler

Lance Corporal Tim Piper troubleshoots a HAWK launcher.

like Piper who ensure the gear is operational so the "birds" are ready for flight.

When Piper enlisted under the Marine Corps' open-contract policy, the Corps could have given him training in electronics, hydraulics, mechanics, or simply fighting the enemy. But they gave him all four when they made him part of a HAWK team.

The HAWK Missile Launcher Loader Technician's Course, taught at Redstone Arsenal, Ala., is one of the toughest and longest courses offered by the Marine Corps. For nine solid months, accepted applicants are taught by lecture and hands-on training everything they need to know about the HAWK missile system.

"It's 36 weeks of electronics, hydraulics, mechanics, and a little bit of everything," said Piper. "The school as a whole is really tough; if you missed even one day, you really had to work hard to get caught up... it was either learn or burn... I mean, if you pass the soldering class, you're NASA-certified —which basically means you're just about as good as the guys soldering on the shuttle."

Upon graduating from the school, Marines can expect to find themselves in one of the two deployable HAWK missile battalions located in North Carolina and Arizona, or at the HAWK missile repair division.

Based in Southern California, the repair division works to refurbish the missile system, supplying the two active battalions with the tools they need to launch their killer bird.

"We put in a lot of overtime during Desert Shield," said Piper, who is currently serving a tour at the repair division. "We were running ourselves ragged, making sure our guys had all the parts they needed before they went over. But it really made me feel like I was doing my part. We had to make sure when they got there everything would be ready for flight and ready to fight."

The bald eagle may be a symbol of our country's strength, but these guys make sure there will always be a HAWK to protect it. ◆

Marine Corps

HAWK Missile Technician

Description—Repairs and troubleshoots HAWK missile launchers and loaders and assists in launching and loading.

Helpful background skills—Ability to perform detailed electrical and mechanical work and a strong mathematical background.

School—Thirty-six weeks at Redstone Arsenal, Ala.

Related civilian jobs—Electrician or missile technician.

Plotting the Course

Story and photo by
Journalist 1st Class
Lorenzo M. Garcia

Petty Officer 3rd Class Shawn Bragg prepares a chart for the *Legare's* next cruise.

The sun and other stars in the galaxy may have an almost mystical quality to some, but to Petty Officer 3rd Class Shawn Bragg the heavenly spheres are simply pieces in his vast toolbox.

Bragg is a quartermaster aboard the Coast Guard cutter *Legare.*

When it comes to communications and navigation, he's the man the captain turns to when the *Legare's* at sea.

"The one exceptional part about the job is being in the middle of the action," Bragg, a West Virginia native, said.

That can mean doing anything from plotting the ship's course on a navigational chart to using a sextant to "shoot the sun" in order to get an exact fix on the *Legare's* current location. Part of the job of navigating entails keeping a careful lookout for other ships or potential obstacles as well.

The job doesn't end there. Bragg is also responsible for all of the *Legare's* visual communications with other ships and shore stations. Messages can be sent or received via flashing light, the hoisting of flags or semaphore. Semaphore involves using hand-held flags attached to staffs to send messages over a short range.

On board the ship's bridge, Bragg's work area isn't hard to pick out. A map stretched out over a large flat table, a compass and several straightedges are the tip offs. In a job that's part geography, part math, part astronomy and highly analytical, those are simply the tools of the trade. Those tools are indicative of the reliance placed on science to get the job done.

When the job involves directing anything from a patrol boat to a Polar-class ice breaker through sometimes rough waters, it's not surprising the quartermaster career field has the highest entrance requirement of any enlisted specialty in the Coast Guard.

Those who make it through the 12-week technical school will be assigned to sea duty during their first tour. That's what goes with, as Bragg would say, "...being in the middle of the action." ◆

Coast Guard

Quartermaster

Description—Performs navigation of ships, steering, lookout supervision, ship control, bridge watch and visual communications and maintains navigational aids.

Helpful background skills—Good vision and hearing and the ability to express oneself clearly in written and spoken form. Grammar, geometry and physics are helpful.

School—Twelve weeks at Yorktown, Va.

Related civilian jobs—Barge, motorboat or yacht captain; quartermaster, merchant ship harbor pilot, navigator, chart maker.

P.S.
Parting Shots

And the Winner is...

Well, it's over!

The winner of the "What's My Line?" contest is none other than Wauzeka, Wisconsin's very own Mark Marsh!

Mark is 14 and attends Wauzeka Public School. His winning caption is underneath the cartoon to my left.

And, Mark, I gotta' admit your caption summed up just about what I was thinking when I saw that guy about 2,000 feet above the ground. And I'm not too sure he could have given me 20!

Anyway, congratulations for your winning entry, Mark. For your effort, I'm sending you this super sharp Coast Guard T-shirt I'm holding. It's bound to make you the hit of Wauzeka!

I haven't forgotten about all you other entrants either. We had quite a few folks who submitted entries where "hitting the beach" was the theme.

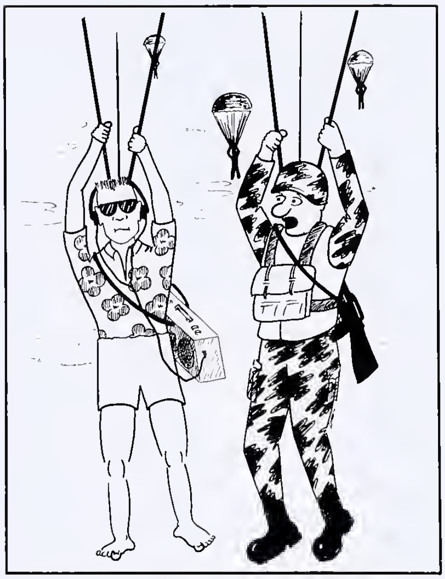
As for me...well, I was looking for captions that were, like me, a little bit out of the ordinary.

For instance, Frank Solari of Hermitage High School in Richmond, Virginia, had an entry that went: "I thought Sarge was kidding when he said that this paratrooper life was a beach!"

Douglas Ludwick of Auburn High School, Auburn, Alabama, submitted: "I guess you didn't lie; you can operate the radio."

Gwen Toby of Birdseye, Indiana, displayed some clever wit with her entry: "Couldn't you afford to pay for the whole plane trip or what?"

These entries are merely the proverbial tip of the iceberg. The list goes on and, as far as I'm concerned, all of you who entered the contest are winners!



"As usual, Johnson, you're out of uniform. Drop and give me 20 right now!"

And, because of that, all of you who submitted entries will be receiving a T-shirt of the service of your choice. Some of you may have already received yours. If not, rest assured that they're on their way.

Thanks for taking time to enter. You've all truly made it a contest I'll never forget!

Next Month:

Our Special Issue on Sports in the Military!

UNIVERSITY OF FLORIDA
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BackTalk

Each month, **PROFILE** solicits comments and opinions from its readers about topics and issues relating to the military. This month, **PROFILE** visited W.C. Hinkley High School, Denver, Colo., and asked journalism students:

With the collapse of the Soviet Union, the U.S. has emerged as the world's premier superpower. If you had total control of the nation's military, how would you use our forces in today's new world order?

FLARE

Anita Bailey, 17, Senior

"If the military were mine to run, I would keep up the technology and manpower. With Europe trying to unite and the situation in the Middle East, I do not think it would be wise to let our military falter... the United States is a leading force and should remain a prominent military force."

Kimi Ceridon, 16, Junior

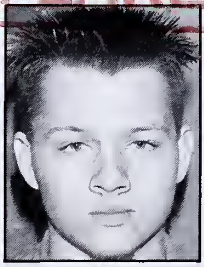
"I would work on a gradual disarmament. Not necessarily a halt to production and immediate disarming, but possibly a time-expanded plan so the United States remains a superpower but not an 'overpower.' "

Stacy Nelms, 16, Junior

"I think the U.S. should at least slow down the production of weapons and slow the money used to defend our country, and, instead, use the money and technology to better it. Who wants to spend good money and technology for a country that's falling apart?"

Stephanie Phelps,
17, Senior

"With all the things that are going wrong in the world today, why not put the military to work helping out where people are really needed? Why can't they work in the slums and the soup kitchens?"



Mike Lee, 17, Senior

"I think it is too soon to say. I think that with the happenings in the Middle East and with the fall of the Soviet Union, a reduction is forseeable. But a definite decision at this time wouldn't be very intelligent."

Johanna McDonald,
18, Senior

"I feel that the United States being the leading military force is a promising sign. Now, however, we need to make the cutbacks. I'm under the impression that it is a necessity. With all of the empty space, we could possibly use it for educational purposes."

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